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#### **DETAILED ACTION**

# Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 1. Claims 11-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The newly amended independent claims 11 and 17 state that the channel is for supply ambient air to components in an aircraft and that a device is independent of the components but it is unclear and therefore indefinite as to what the components are. Are the components everything that make up the air channel and engine, are they just the combustion chamber and fuel?
- 2. Claims 11-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The newly amended independent claims 11 and 17 state that the blower of pump are in the area of the second air inlet which is unclear and therefore indefinite. What is considered in the area of the second air inlet? Does it have to be in the inlet, is the channel in the inlet, is the entire propulsion system considered "in the area"?

Claim Rejections - 35 USC § 102

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 11-14 and 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Schwarzler (US Patent #3991782).
  - a. For Claims 11, 13, 14, and 17, figure 3 of Schwarzler '782 discloses a ram air channel for an aircraft comprising a first air inlet (21) with a constant flow cross-section, a main flow channel (2) extending downstream of the first air inlet (21), a second air inlet (22) independent from the first air inlet, a movable element (3) in the form of a flap that rotates about an axis (9) for setting a flow cross section of the second air inlet (22), the movable element (3) being movable between a first at least partially open position and a second closed position, and a device (the engine) that is independent of the channel for creating low pressure in the area of the second air inlet, the device including at least a pump (it is inherent that jet engines have pumps and that the engine itself creates a low pressure area so as to pull air into the engine) that is located in the area of the second air inlet, so as to move the movable element (3) into a first position to at least partially open the flow cross-section of the second air inlet (22). Figure 2 of Schwarzler '782 and column 2, lines 63-67 teaches, "The flap 3 is hinged to the wall structure of duct 2 by means of a hinge 9. For low pressure in the duct, i.e. during takeoff and during low speed cruising, flap 3 swings inwardly thus opening

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the secondary opening 22 (FIG. 3)." Thus the duct wall (2) creates a low pressure in the area of the second inlet (22).

- b. For Claim 12, figure 3 of Schwarzler '782 discloses that the second air inlet (22) is connected to the main flow channel (2) by a side channel which is at a predetermined angle to the main flow channel (2).
- c. For Claim 16, figure 3 of Schwarzler '782 discloses a mechanical device (4) operable to hold the movable element (3) in the first position to at least partially open the flow cross-section of the second air inlet (22) or in a second position to shut the flow cross-section of the second air inlet (22).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claim 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Schwarzler (US Patent #3991782) as applied to claim 11 above, and further in view of Bullock (US Patent #3302657). Schwarzler '782 is silent about the use of an electro-mechanical control device to operate the movable element between a first and second position, however, the only figure of Bullock '657 teaches an electro-mechanical device (16) that operates a movable element (4) between a first and second position. Therefore it would have been obvious to someone of ordinary skill in the art at the time of the invention to

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modify Schwarzler '782 with the motor of Bullock '657 in order to accurately control the movable element so that a precise amount of air can be allowed to enter the engine.

## Response to Arguments

5. Applicant's arguments filed 1/12/2010 have been fully considered but they are not persuasive. The Schwarzler '782 reference clearly discloses all limitations as claimed. The amended independent claims have been rejected under 35 USC 112 as being indefinite as it is not clear what are considered components in the aircraft and what is considered the area of the second air inlet.

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHILIP J. BONZELL whose telephone number is (571)270-3663. The examiner can normally be reached on M-Th 8-5;

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mansen can be reached on (571)272-6608. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. J. B./ Examiner, Art Unit 3644

pjb /Tien Dinh/ Primary Examiner, Art Unit 3644